

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously presented) An electrolytic plating method, comprising:
using a wiring board, wherein a surface of the wiring board having formed thereon microvia holes having a copper foil at the bottom of each microvia hole, as one pole, and an insoluble electrode as the other pole;
stirring a metal plating solution which contains iron ions of at least 0.1 gram/liter so as to make the solution flow in parallel to a surface to be plated of the wiring board; and
performing electrolytic plating by applying a forward/reverse current with the use of a metal plating solution so that the microvia holes having the copper foil at the bottom formed on the surface of the wiring board may be filled up with metal plating.
2. (Previously presented) The electrolytic plating method according to claim 1, wherein:
the metal plating solution is composed of copper plating solution; and
the flow rate of the copper plating solution is adjusted to a level at which copper deposition speeds both on the surface and inside microvia holes of the wiring board are optimum.
3. (Previously presented) The electrolytic plating method according to claim 2, wherein
the flow rate of the copper plating solution is adjusted to bring the iron ion amount present near the wiring board surface to a level at which all the microvia holes are almost fully filled and the plating layer thickness on the wiring board surface becomes optimum.
4. (Previously presented) The electrolytic plating method according to claim 1, wherein:
the insoluble electrode is configured by a multi-aperture metal mesh.
5. (Original) The electrolytic plating method according to claim 1, wherein:
the metal plating solution is a copper plating solution; and
the wiring board is a printed-circuit board.

DOCKET NO.: TALW-0180

PATENT

Application No.: 09/805,841

Office Action Dated: November 5, 2003

6. (Original) The electrolytic plating method according to claim 1, further comprising:
arranging a plating bath which accommodates the insoluble electrode and the wiring board, and a copper dissolved bath which supplies copper ions to said plating bath; and
circulating a solution within the copper dissolved bath and the plating solution within the plating bath.

7 - 11. (Canceled)